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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,939	08/09/2001	Hitoshi Shoji	9319S-000257	4928
27572	7590	04/23/2004	EXAMINER	
HARNESSE, DICKEY & PIERCE, P.L.C.			CHOWDHURY, TARIFUR RASHID	
P.O. BOX 828			ART UNIT	PAPER NUMBER
BLOOMFIELD HILLS, MI 48303			2871	

DATE MAILED: 04/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/925,939

**Applicant(s)**

SHOJI, HITOSHI

**Examiner**

Tarifur R Chowdhury

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-11,14-19 and 21-26 is/are rejected.
- 7) ☒ Claim(s) 4,12,13 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Drawings*

1. Figure 16 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Specification*

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-3, 5-11, 14-19, 21-26 are rejected under 35 U.S.C. 103(a) as being obvious over Muramatsu, USPAT 6,675,470 in view of Nishimoto et al., (Nishimoto), JP 5-88195.**

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an

invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Muramatsu discloses and shows in Figs. 1-3, an electrooptical unit comprising:

- an LCD panel (applicant's electrooptical panel) overlapping a circuit board (10) with a predetermined space therebetween, the electrooptical panel including panel-side terminals (53-1) facing circuit board-side terminals of the circuit board; and
- a flexible board (20) overlapping part of the electrooptical panel, the flexible board including a plurality of front-side terminals (22-1) formed on a front side thereof, a plurality of rear-side terminals (22-2) formed on a rear side thereof, the rear-side terminals being electrically connected with the panel-side terminals via conductive material (col. 6, lines 35-39),

and the front-side terminals being electrically connected with electronic components.

Muramatsu differs from the claimed invention because he does not explicitly disclose that the front-side terminals and the rear-side terminals are connected via through holes.

Nishimoto discloses an electrooptical unit that includes a flexible wiring board wherein the front-side terminals and the rear-side terminals of the flexible board are connected via through holes. He also discloses that such an arrangement is advantageous since it improves the operability.

Nishimoto is evidence that ordinary workers in the art would find a reason, suggestion or motivation to connect the front-side terminals and the rear-side terminals via through holes.

Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention was made to modify the electrooptical unit of Muramatsu by connecting the front-side terminals and the rear-side terminals of the flexible board via through holes in order to improve operability.

Muramatsu also shows in Fig. 2 that all of the flexible board (20) overlaps the electrooptical panel and that the electrooptical panel, the flexible board and the electronic component have a common overlapping region.

Muramatsu further shows in Fig. 1 that the electronic components include a connector (30) having connector electrodes elastically connected to first front-side terminals of the front-side terminals and the circuit board-side terminals by being

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sandwiched between the flexible board (20) and the circuit board (10), and an electrical circuit element surface-mounted on second-front side terminals of the front-side terminals.

Muramatsu discloses that the electronic panel has a driver IC mounted thereon, and the panel-side terminals include I/O terminals of the driver IC and the electrical circuit element is an external element for operating the driver IC.

Muramatsu also shows in Figs 1-3 that pluralities of electrode patterns extend from an area where the driver IC is located to an image display area of the electrooptical panel.

Muramatsu discloses that the panel-side terminals are formed of an ITO film and that the conductive material is an anisotropic conductive material.

Accordingly, claims 1-3, 5-11, 14-19, 21-26 would have been obvious.

***Allowable Subject Matter***

5. Claims 4, 12, 13 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

6. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

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**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tarifur R Chowdhury whose telephone number is (571) 272-2287. The examiner can normally be reached on M-Th (6:30-5:00) Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (571) 272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TRC  
April 18, 2004

  
TARIFUR R. CHOWDHURY  
PRIMARY EXAMINER